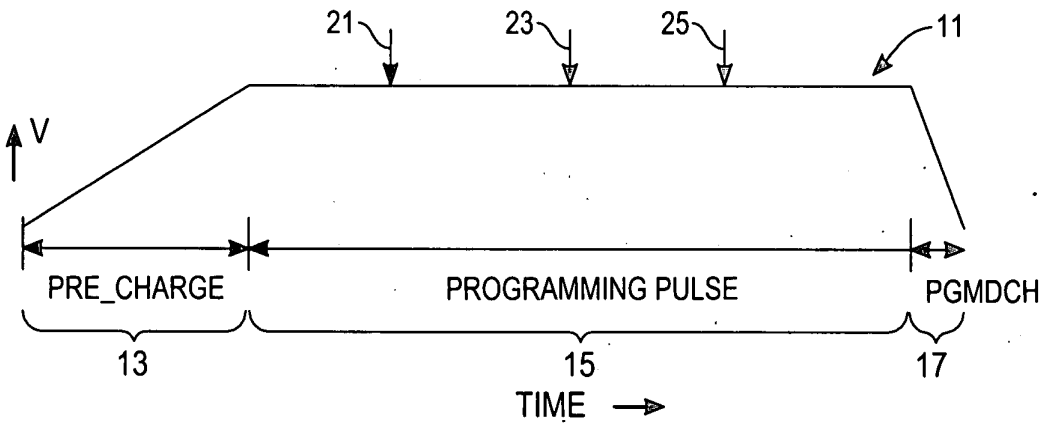
21
23
25
11
V
PRE_CHARGE
PROGRAMMING PULSE
PGMDCH
13
15
17
TIME

Fig._1

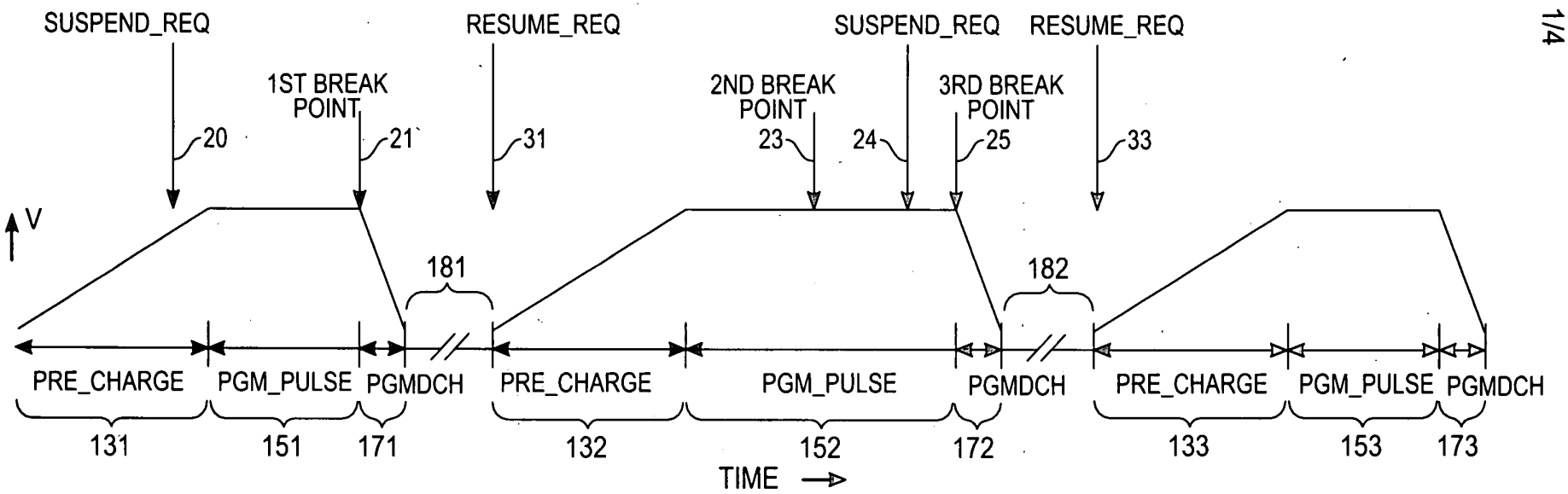
SUSPEND_REQ
RESUME_REQ
SUSPEND_REQ
RESUME_REQ
1ST BREAK POINT
2ND BREAK POINT
3RD BREAK POINT
20
21
31
23
24
25
33
V
181
182
PRE_CHARGE
PGM_PULSE
PGMDCH
PRE_CHARGE
PGM_PULSE
PGMDCH
PRE_CHARGE
PGM_PULSE
PGMDCH
131
151
171
132
152
172
133
153
173
TIME

Fig._2

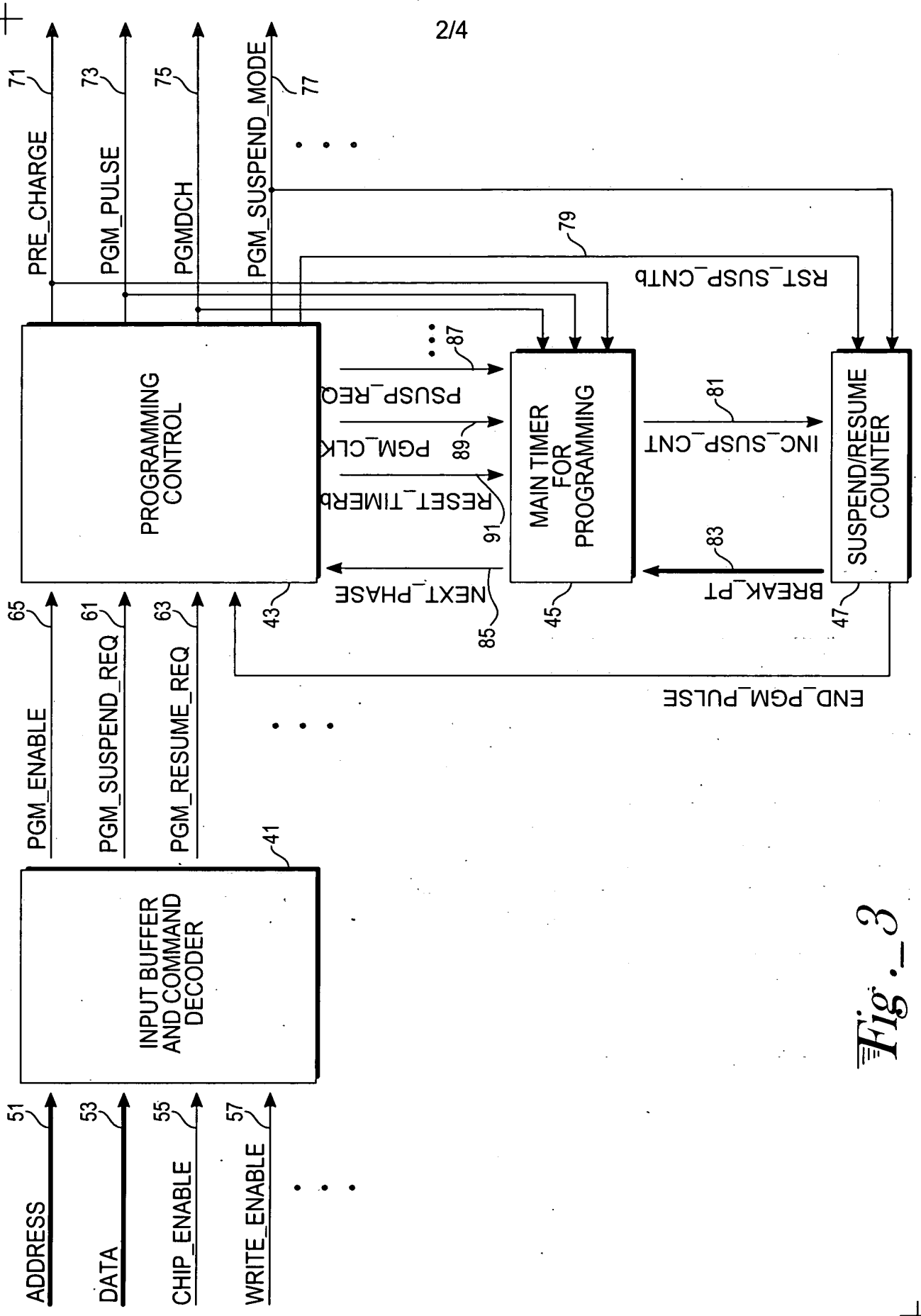
ADDRESS
DATA
CHIP_ENABLE
WRITE_ENABLE
INPUT BUFFER AND COMMAND DECODER
PGM_ENABLE
PGM_SUSPEND_REQ
PGM_RESUME_REQ
PROGRAMMING CONTROL
PRE_CHARGE
PGM_PULSE
PGMDCH
PGM_SUSPEND_MODE
RST_SUSP_CNTb
PSUSP_REQ
PGM_CLK
RESET_TIMERb
NEXT_PHASE
MAIN TIMER FOR PROGRAMMING
INC_SUSP_CNT
BREAK_PT
SUSPEND/RESUME COUNTER
END_PGM_PULSE
51
53
55
57
41
65
61
63
43
71
73
75
77
79
87
89
91
85
45
81
83
47

Fig. 3

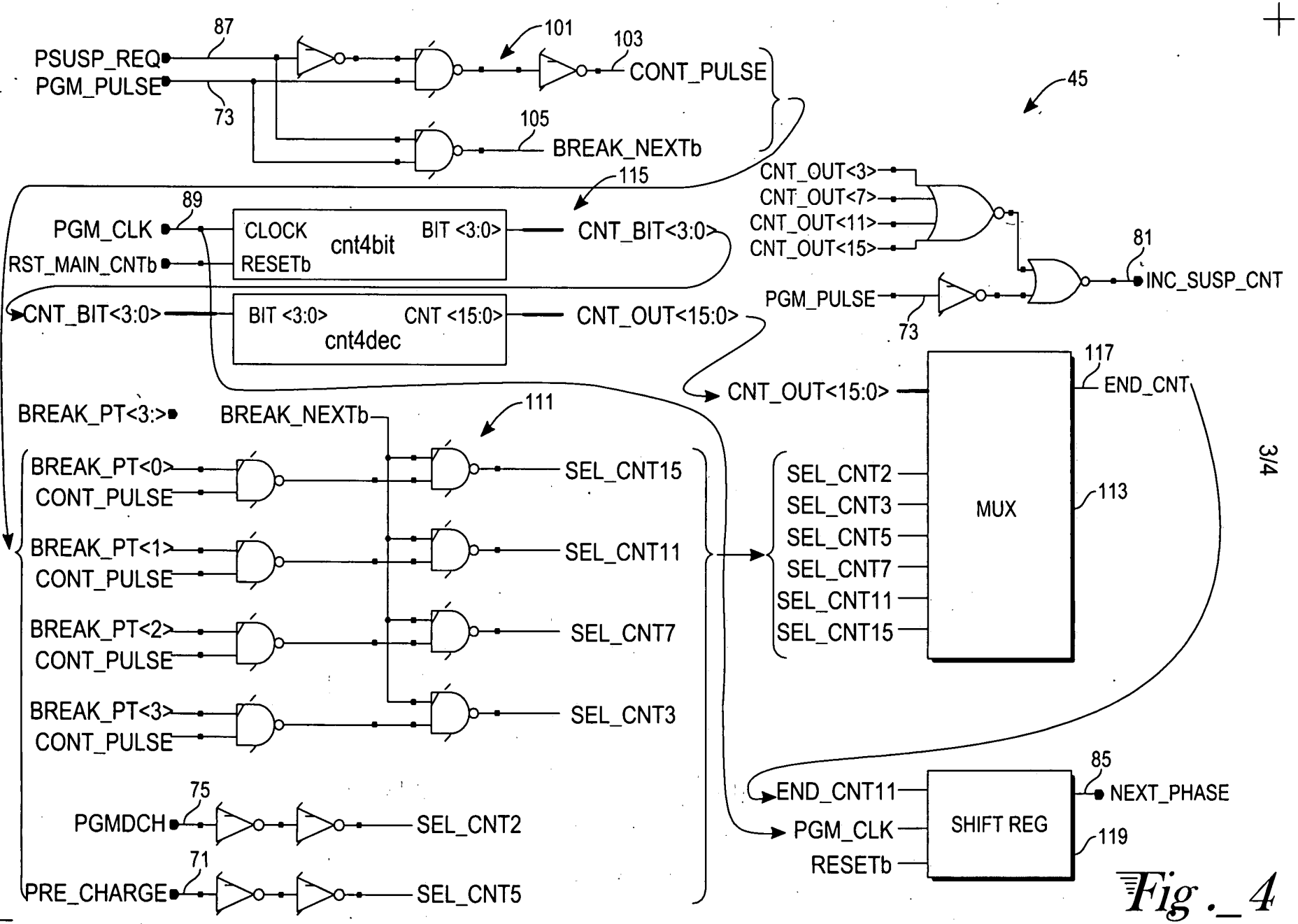
87
PSUSP_REQ
PGM_PULSE
73
101
103
CONT_PULSE
105
BREAK_NEXTb
45
115
89
PGM_CLK
CLOCK
cnt4bit
BIT <3:0>
CNT_BIT<3:0>
RST_MAIN_CNTb
RESETb
CNT_BIT<3:0>
BIT <3:0>
CNT <15:0>
cnt4dec
CNT_OUT<15:0>
CNT_OUT<3>
CNT_OUT<7>
CNT_OUT<11>
CNT_OUT<15>
81
INC_SUSP_CNT
PGM_PULSE
73
117
END_CNT
CNT_OUT<15:0>
BREAK_PT<3:>
BREAK_NEXTb
111
BREAK_PT<0>
CONT_PULSE
SEL_CNT15
BREAK_PT<1>
CONT_PULSE
SEL_CNT11
BREAK_PT<2>
CONT_PULSE
SEL_CNT7
BREAK_PT<3>
CONT_PULSE
SEL_CNT3
SEL_CNT2
SEL_CNT3
SEL_CNT5
SEL_CNT7
SEL_CNT11
SEL_CNT15
MUX
113
75
PGMDCH
SEL_CNT2
71
PRE_CHARGE
SEL_CNT5
85
END_CNT11
PGM_CLK
RESETb
SHIFT REG
NEXT_PHASE
119

Fig. 4

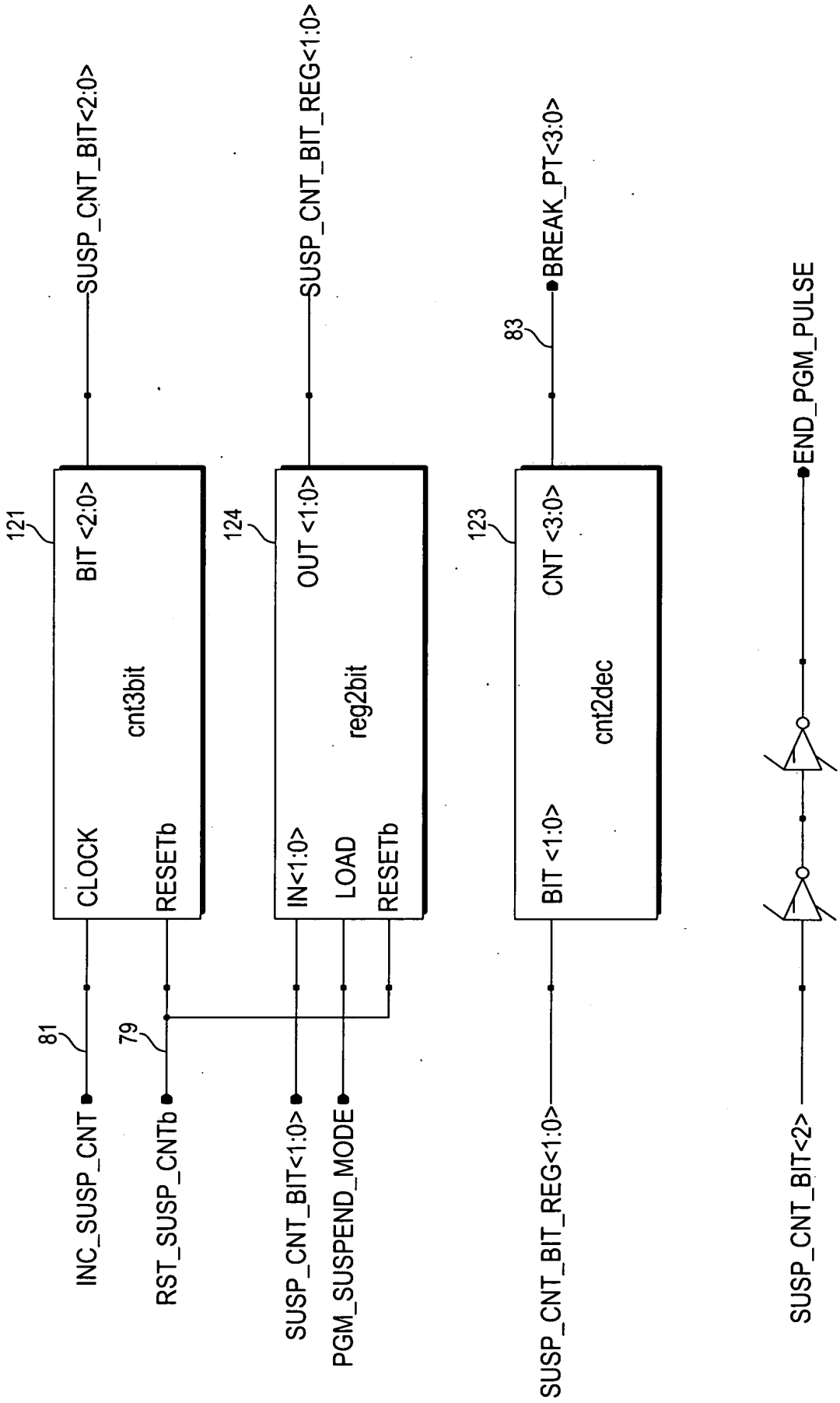
SUSP_CNT_BIT<2:0>
SUSP_CNT_BIT_REG<1:0>
BREAK_PT<3:0>
END_PGM_PULSE
121
124
123
83
BIT <2:0>
cnt3bit
CLOCK
RESETb
OUT <1:0>
reg2bit
IN<1:0>
LOAD
RESETb
CNT <3:0>
cnt2dec
BIT <1:0>
81
79
INC_SUSP_CNT
RST_SUSP_CNTb
SUSP_CNT_BIT<1:0>
PGM_SUSPEND_MODE
SUSP_CNT_BIT_REG<1:0>
SUSP_CNT_BIT<2>

Fig. 5